

ABSTRACT OF THE DISCLOSURE

A plasma processing method for plasma processing a specimen utilizing a plasma processing apparatus including a plasma generating unit, a process chamber capable of having an inside pressure thereof reduced, wherein the process chamber includes an outer cylinder having the capability of withstanding a reduced pressure, and an inner cylinder arranged inside the outer cylinder and a process gas supply unit for supplying a gas to the process chamber, a specimen table for holding a specimen, a vacuum pumping unit, and a monitor unit. the method includes detecting a temperature of the inner cylinder of the process chamber utilizing the monitor unit to one of continuously monitor the inner cylinder temperature and optionally monitor the inner cylinder temperature at a time of plasma processing of a specimen.